

Notice of Allowability

Application No.

09/891,730

Examiner

Lynette T. Umez-Eronini

Applicant(s)

VERHAVERBEKE ET AL.

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1765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/27/2004.
2. ☒ The allowed claim(s) is/are 1, 3, 4, 6-13, 15-23, 41-51, 59-66, 67-78, 79, 80-82, 83, 84-85, 86-87, 88-96, 100, 102, 104, 106, 109, 110 and 112.
3. ☒ The drawings filed on 25 June 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

LANVPH
PRIMARY EXAMINER



REASON FOR ALLOWANCE

1. Claims 1, 3, 4, 6-13, 15-23, 41-51, 59-66, 67-78, 79, 80-82, 83, 84-85, 86-87, 88-96, 100, 102, 104, 106, 109, 110 and 112 are allowed.

As to claims 1, 3, 4, 6-13, and 15-23, the prior art of record taken alone or in combination fails to suggest, teach or render obvious a method of processing a wafer comprising: exposing a wafer to a solution comprising ethylenediaminediortho-hydroxyphenylacetic acid (EDDHA) along with NH_4OH , H_2O_2 , and H_2O , wherein said wafer is exposed to said solution in an approximate range of 30 and 90 seconds while spinning and applying acoustic waves to said wafer, in combination with the rest of the limitations of said claims;

As to claims 41-51, 59-66, 79-96, and 100; the prior art of record taken alone or in combination fails to suggest, teach or render obvious the sequence of steps in a method cleaning a wafer, in combination with the rest of the limitations of the said claims;

As to claims 67-78, the prior art of record taken alone or in combination, fails to suggest, teach, or render obvious a method of processing a wafer comprising the step of after placing a wafer in a single wafer cleaning tool, dispensing an HF solution on said wafer for 2-3 seconds to etch approximately 0.5 \AA - 5 \AA of a thermal oxide on said wafer, along with the rest of the limitations of the said claims; and

As to claims 102; 104; 106, 109, and 110; and 112, the prior art of record, taken either alone or in combination, fails to disclose or render obvious a method of cleaning a

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wafer, respectively with N,N'-Bis(2-hydroxyphenyl)ethylenediiminodiacetic acid (HPED); triethylenetranitrilohexazecetic acid (TTHA); desferrierrrioxamin B.; and molybdic acid, in combination with the rest of the limitations of the above claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynette T. Umez-Eronini whose telephone number is 571-272-1470. The examiner is normally unavailable on the First Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on 571-272-1465. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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February 10, 2005

LAN VINH
PRIMARY EXAMINED

A handwritten signature in black ink, appearing to be 'V. Lan', written over the 'PRIMARY EXAMINED' stamp.